What is claimed is:

1. A centralized method of providing admission control functionality in a communications system including a plurality of nodes, said plurality of nodes including a control node, at least a first node coupled to a second node by a first link, a third node coupled to the second node by a second link and a fourth node coupled to the third node by a third link, together by communications links connected together by links, the method comprising:

maintaining a set of link bandwidth utilization information, the set of link bandwidth utilization information including bandwidth utilization statistics for at least each of the first, second and third nodes; and

operating the control node to receive a service request corresponding to the first node and to determine from said maintained set of link bandwidth utilization information if there is sufficient bandwidth available on at least said second and third links to satisfy said service request.

2. The method of claim 1, further comprising:

when it is determined from said maintained set of link bandwidth utilization information that there is sufficient bandwidth available to satisfy said service request:

operating the control node to signal at least one of said first, second, third and fourth nodes that said service request has been granted; and

operating the control node to update link bandwidth utilization statistics for at least two of said first, second and third links to reflect bandwidth that will be utilized by the requested service that was granted.

3. The method of claim 1, further comprising:

operating the control node to generate the link bandwidth utilization information corresponding to said second link from an estimate of bandwidth that will be used on said second link by services over which said control node does not have admission control and a sum of services which will used said second link which said control node authorized.

4. The method of claim 3, wherein said link bandwidth utilization information corresponding to said second link is further generated as a function of a link utilization scaling factor.

5. The method of claim 4, wherein best effort Internet traffic is carried over said second link and where said link bandwidth utilization information corresponding to said second link is further generated as a function of the physical link capacity of links used to couple Internet service users to said second link and an average of the physical link capacity which is used over a period of time by said users for Internet service.

6. The method of claim 5, wherein said control node generates a control message to reduce the amount of bandwidth allocated to best effort traffic on one of said first, second and third links, when a service request for a service requiring a guaranteed amount of bandwidth on said one of said first, second and third links is received and said guaranteed amount of bandwidth is not available due to best effort traffic on said one of said first, second and third links.

7. The method of claim 1, further comprising:

when it is determined from said maintained set of link bandwidth utilization information that there is insufficient bandwidth available to satisfy said service request; and

determining if a user to whom said service request corresponds is using other services which can be terminated to provide the bandwidth required to satisfy said service request.

8. The method of claim 7, further comprising:

when it is determined that said user to whom said service request corresponds is not using other services which can be terminated to provide the bandwidth required to satisfy said service request, operating the control node to send a messagedenying said service request.

9. The method of claim 7, further comprising:

when it is determined that said user to whom said service request corresponds is using other services which can be terminated to provide the bandwidth required to satisfy said service request, presenting the user with the operation of terminating the services being provided to said user which can be used to provide the bandwidth required to satisfy the service request.

10. The method of claim 9, further comprising:

operating the control node to receive a reply from said user indicating a desire to terminate services or not to terminate services; and

denying said service request when said reply indicates a desire not to terminate services; and

granting said service request when said reply indicates a desire to terminate services.

11. The method of claim 10, where said step of granting said service request includes:

operating the control node to terminate at least some services provided to said user and to reallocate at least some of the bandwidth used by said services to providing the requested service.

12. The method of claim 10, wherein presenting the user with the operation of terminating the services includes:

providing information to said user through a web interface indicating which services are available for termination.

13. A communications system comprising:

a first node;

a second node coupled to the first node by a first link;

a third node coupled to the second node by a second link;

a fourth node coupled to the third node by a third link; and

a control node coupled to at least one of said first, second, third, and further nodes, said control node including and maintaining a set of link bandwidth utilization information, the set of link bandwidth utilization information including bandwidth utilization statistics for at least each of the first, second and third nodes; said control node further including:

means for receiving a service request corresponding to the first node and to determine from said maintained set of link bandwidth utilization information if there is sufficient bandwidth available on at least said second and third links to satisfy said service request.

14. The system of claim 13, wherein said control node further includes:

means for signaling at least one of said first, second, third and fourth nodes that said service request has been granted when it is determined from said maintained set of link bandwidth utilization information that there is sufficient bandwidth available to satisfy said service request:; and

means for updating link bandwidth utilization statistics for at least two of said first, second and third links to reflect bandwidth that will be utilized by the requested service that was granted.

15. The system of claim 13, wherein said control node further comprises:

means for generating link bandwidth utilization information corresponding to said second link from an estimate of bandwidth that will be used on said second link by services over which said control node does not have admission control and a sum of services which will used said second link which said control node authorized.

16. The system of claim 15, wherein said link bandwidth utilization information corresponding to said second link is further generated as a function of a link utilization scaling factor.

17. The system of claim 16, wherein best effort Internet traffic is carried over said second link and where said link bandwidth utilization information corresponding to said second link is further generated as a function of the physical link capacity of links used to couple Internet service users to said second link and an average of the physical link capacity which is used over a period of time by said users for Internet service.